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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,273	06/01/2006	Yann Lepetitcorps	06062	3149
23338	7590	10/06/2008	EXAMINER	
DENNISON, SCHULTZ & MACDONALD			WARE, DEBORAH K	
1727 KING STREET				
SUITE 105			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			1651	
			MAIL DATE	DELIVERY MODE
			10/06/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/581,273	LEPETITCORPS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	DEBBIE K. WARE	1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 01 June 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-12 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1.) Certified copies of the priority documents have been received.  
 2.) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/1/06</u> .  | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

Claims 1-12 are pending.

### ***Preliminary Amendment***

The Preliminary Amendment filed June 1, 2006, has been received and entered.

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on June 1, 2006, has been received and entered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by DERWENT ABSTRACT (CN 1144102A abstract).

Claims are drawn to a method of extracting organic substances present in coral comprising treating the coral with a fluid or mixture of fluids in a supercritical state

without modifying the crystalline structure of said coral, and a temperature less than 270 degrees C, and at a pressure much higher than the critical pressure of the fluid.

DERWENT ABSTRACT teaches the same, see entire abstract, all lines, wherein an organic substance present in coral is subjected to extracting procedures using supercritical carbon dioxide, at a temperature less than 270 degrees C and at a given optimum pressure which can be higher than the critical pressure of the fluid.

The claims are identical to the cited DERWENT ABSTRACT and are, therefore, considered to be anticipated by the teachings therein.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over DERWENT ABSTRACT in view of US 4990333, Lane et al, both cited on enclosed PTO-892 Form.

Claims are further drawn to extraction with ethanol, acetone and mixtures of either with carbon dioxide at varied optional optimum temperature and pressure to provide for a coral treatment to provide for a bone substitute.

DERWENT ABSTRACT is discussed above.

Lane et al teach extraction with ethanol, acetone and mixtures of either with carbon dioxide at varied optional optimum temperature and pressure to provide for a coral treatment to provide for a bone substitute, note col. 1, lines 53-54, col. 4, lines 25-26 and 61.

Claims differ from the DERWENT ABSTRACT in that ethanol extraction and varied other claimed extractions and optimum temperature and pressure increases and/or changes are not specifically described by the ABSTRACT to provide for a bone substitute. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply ethanol extract in a coral treatment as disclosed by DERWENT to optimize extraction procedures and to remove contaminants with carbon dioxide mixture containing ethanol in order to provide for a bone substitute. Bone is often used in oral areas and other areas of the body which requires sterilization and no contaminants.

To use a well known technique as ethanol extraction in the cited prior art, Lane et al, is clearly an obvious modification of the cited prior art. One of skill in the art would

have been motivated to use ethanol and carbon mixtures because they are well known in the art and also removes unwanted debris or contaminants. To optimize pressure and temperature in order to maximize extraction yield is clearly within the purview of an ordinary artisan and matter of routine optimization in the art. In the absence of persuasive evidence to the contrary the claims are rendered *prima facie* obvious over the cited prior art.

All claims fail to be patentably distinguishable over the state of the art discussed above and cited on the enclosed PTO-892 and/or PTO-1449. Therefore, the claims are properly rejected.

The remaining references listed on the enclosed PTO-892 and/or PTO-1449 are cited to further show the state of the art.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBBIE K. WARE whose telephone number is (571)272-0924. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deborah K. Ware/

Deborah K. Ware

Examiner

Art Unit 1651